| Index | of Cl | aims |  |
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| Application No. | Applicant(s)   |  |
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| 09/476,290      | JOHNSON ET AL. |  |
| Examiner        | Art Unit       |  |
| Michael Pak     | 1646           |  |

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|       | 4)   |          | $\vdash$ |          |     |     |   |    |        |          |
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|          | 65   |              | $\exists$ |          |              |          |          |          |          | ī        |
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|          | 74   |              |           |          |              | L.,      |          |          |          |          |
|          | 75   |              | _         |          |              | _        | _        |          | -        | $\dashv$ |
|          | 79   | $\vdash$     | -         | _        | -            |          |          |          | _        | $\vdash$ |
|          | 78   |              |           |          |              |          |          |          |          | Н        |
|          | 79   |              |           |          |              |          |          |          |          |          |
|          | 8ф   |              |           |          |              |          |          |          |          |          |
|          | 8]   |              |           |          |              | _        |          | _        | <u> </u> | Ш        |
|          | 82   | $\vdash$     | _         | _        |              | -        | _        |          | -        | Н        |
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| <u> </u> | 85   | $\vdash$     |           |          |              | _        |          |          | $\vdash$ | H        |
|          | 86   |              |           |          |              |          |          |          |          |          |
|          | 87   |              |           |          |              | _        | _        | _        |          |          |
|          | 88   | $\vdash$     |           |          | _            |          | <u> </u> | <u> </u> | -        | $\vdash$ |
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|          | 98<br>94<br>95<br>96   |              |           |          | ļ            | ļ        | _        |          | <u> </u> |          |
|          | 95   | }            | <u> </u>  | -        |              | -        | -        | -        | ╀        | $\vdash$ |
|          | 98   | -            | _         | _        | <del> </del> | -        | -        | -        | +-       |          |
|          | 98   | <del> </del> |           | $\vdash$ | $\vdash$     | +        | $\vdash$ | $\vdash$ | -        |          |
| <u> </u> | 99   | 1            |           |          | $\vdash$     | ✝        | T        | T        |          |          |
|          | 100  | 1.7          |           | _        | T            |          | T        | T        | П        |          |

|              | aim            |              |          |          |          | ate      |              |          |          | $\neg$   | Cla      | im                               |  |          |          | Г                  | ate      |          |          |          | ٦         | Cla      | aim      |                   |  |  | Е          | ate            |                |                     |               | _ |
|--------------|----------------|--------------|----------|----------|----------|----------|--------------|----------|----------|----------|----------|----------------------------------|--|----------|----------|--------------------|----------|----------|----------|----------|-----------|----------|----------|-------------------|--|--|------------|----------------|----------------|---------------------|---------------|---|
|              | 2011           |              |          |          | - 1      | Jaie     | <del>.</del> | - 7      | Т        | $\dashv$ |          |                                  | X  |          | - 1      | Ť                  | 1        | Т        | Т        |          | 7         |          |          |                   |  |  | ΤĪ         | Ī              |                | $\neg$              | Т             | _ |
| Final        | Original       |              |          |          |          |          |              |          |          |          | Final    | Original                         | 3156   |          |          |                    |          |          |          |          |           | Final    | Original | 3/5/64            |  |  |            |                |                |                     |               |   |
|              | ,              |              |          | -        |          |          | -            |          | $\dashv$ | _        |          |                                  |  |          |          | $\dashv$           | +        | +        | -        | -        | $\dashv$  |          | 101      | 1.7               | 1-   | -                                      |            | $\dashv$       | $\dashv$       | +                   | +             | _ |
|              | 1              |              | -        | -        | $\dashv$ |          |              |          | -        | -        |          | 5 8 8 4 5                        |  |          |          | _                  | $\dashv$ |          | +        | +        | $\dashv$  | $\vdash$ | 102      | 1                 |  |  | -          | -+             | $\dashv$       | +                   | +             | _ |
|              | 1              |              |          |          |          |          |              |          | -+       |          |          | <u> </u>                         |  |          |          |                    | $\dashv$ | +        | +        | +        | $\dashv$  | -        | 103      | +                 | $\vdash$   | $\vdash$                               | $\dashv$   | $\dashv$       | $\dashv$       | +                   | +             | _ |
|              | 1              |              | $\dashv$ | $\dashv$ |          |          | $\dashv$     | $\dashv$ | -        | -        | -        | 30                               |  |          |          | $\rightarrow$      | -+       | +        | +        | +        |           |          | 103      | +                 | $\vdash$   | $\vdash$                               | -          |                | $\dashv$       | +                   | -             | _ |
|              | <u> </u>       |              | -        |          | -        | -        | -            |          | -        | -        |          | J#<br>DE                         |  |          |          | -                  | $\dashv$ | +        | +        | +        |           |          | 105      | +                 |  |  | -          |                |                | $\dashv$            | +             | _ |
|              |                |              | $\dashv$ | -        | $\dashv$ |          | -            |          | -        |          | $\vdash$ | 56                               |  | _        |          | -                  | +        | +        | +        | +        |           |          | 106      | <b>V</b>          |  | H                                      | -          | +              | <del>- t</del> | ╅                   |               | _ |
|              | l P            |              | _        |          | -        |          |              |          | -        | -        |          | 57                               |  |          | _        |                    | -+       | $\dashv$ | $\dashv$ | +        | -         | -        | 107      | j                 | H  |  | $\dashv$   | 1              | 一              | -                   | +             | _ |
|              | H H            |              | -        |          | _        |          | -            |          | -        |          | -        | 58                               |  | -        | -        | $\dashv$           |          | +        | +        |          | $\dashv$  |          | 108      | 1                 | $\vdash$   | $\vdash$                               |            | t              | _              | +                   | 十             | _ |
|              | 1              | $\vdash$     |          |          |          |          | $\dashv$     |          | -        | -        |          | 59                               |  | -        |          |                    | -+       | +        | $\dashv$ | +        | ┥         | -        | 109      |                   | <del>                                     </del> | H                                      | $\dashv$   |                | +              | +                   | 十             |   |
|              | 10             |              |          |          | -        | -        | $\dashv$     | -        | -        | $\dashv$ | <u> </u> | 60                               |  |          | -        |                    | -        | +        | -+       | +        | ┪         |          | 110      | $\Box$            | $\vdash$   | $\Box$                                 | -          | t              | 寸              | $\dashv$            |               | _ |
|              | 111            | -            |          |          | _        |          | $\dashv$     |          | +        |          |          | <b>e</b> 1                       |  |          | H        | $\vdash$           |          | +        | -+       | $\dashv$ | -         |          | 111      | $\Box t$          | <del>                                     </del> | $\vdash$                               | _          | 1              | $\dashv$       | 十                   |               | _ |
| <del> </del> | 12             | Н            |          | $\dashv$ | _        | $\vdash$ |              |          | -+       | $\dashv$ |          | <b>d</b> 2                       |  |          | $\vdash$ | H                  | +        | $\dashv$ | +        | +        | $\dashv$  | <b>—</b> | 112      | +t                | T  | $\vdash$                               |            | 1              | $\dashv$       | $\top$              | 十             | _ |
| -            | 13             | $\vdash$     | $\vdash$ |          |          | $\vdash$ | $\vdash$     | $\dashv$ | +        | $\dashv$ | -        | A A                              |  |          |          | $\vdash$           | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\exists$ |          | 113      | H                 | $t^-$  |  |            |                | $\dashv$       | $\dashv$            | $\dashv$      | _ |
|              | 14             | $\vdash$     |          | -        | $\vdash$ | $\vdash$ |              |          | $\dashv$ | $\dashv$ | -        | 63<br>64                         | Ι—   |          | -        | $\vdash$           | $\dashv$ | $\dashv$ |          | $\top$   | 1         |          | 114      | $\dagger \dagger$ |  | $\Box$                                 |            | $\neg$         | $\dashv$       | $\top$              | $\top$        | _ |
|              | 15             | $\vdash$     | $\vdash$ |          |          | H        |              |          | +        | $\dashv$ |          | 65                               | _  |          | $\vdash$ | $\vdash$           | $\dashv$ | $\dashv$ | $\dashv$ | 7        | 1         |          | 115      | 11                |  | П                                      |            |                |                | $\top$              | 十             | _ |
| <u> </u>     | 16             | -            |          | -        |          | $\vdash$ |              |          | +        | -        |          | 65<br>66<br>67                   | $\vdash$   | -        |          | $\vdash$           | $\dashv$ |          | 十        | +        | 1         |          | 116      | 11                |  |  |            | $\neg \dagger$ | $\neg$         | 寸                   | $\top$        |   |
|              | 17             | $\vdash$     | _        |          |          | $\vdash$ | $\vdash$     | $\vdash$ | $\vdash$ | -        | -        | 67                               | _  |          |          | $\vdash$           | $\dashv$ | $\dashv$ | $\dashv$ | +        | 1         |          | 117      | 11                |  |  |            |                | 寸              | 寸                   | 十             | _ |
| <u> </u>     | 1B             | -            |          |          | _        |          |              |          |          |          |          | 68                               | -  |          |          | $\Box$             | $\dashv$ | 1        |          | $\top$   | ┑         |          | 118      | ⇈                 |  |  |            |                |                | $\Box$              | 7             | _ |
|              | 19             |              |          |          |          | $\vdash$ |              | $\vdash$ | -        | _        |          | <b>a</b> 6                       | $\vdash$   |          |          |                    |          | $\dashv$ | 7        | $\top$   | 1         |          | 119      | #                 | 1  |  |            |                |                | -                   | T             | _ |
|              | 20             |              |          |          |          | H        |              | -        | $\dashv$ | $\dashv$ |          | 68<br>69<br>70                   |  |          | -        |                    | $\neg$   | $\dashv$ | $\dashv$ |          | ٦.        |          | 120      | #                 |  |  |            |                | T              | $\top$              | 寸             | _ |
|              | 2              |              |          |          |          | $\vdash$ |              |          | $\neg +$ | $\dashv$ |          | 7                                | $\vdash$   |          | $\vdash$ |                    | $\dashv$ | 7        |          | $\top$   | 1         |          | 121      | Ħ                 | Ė  |  |            |                | 1              | $\neg$              | $\top$        | Т |
|              | 2;<br>22       |              |          |          |          | H        | _            |          | $\vdash$ | _        |          | 72                               | -  | $\vdash$ |          |                    |          | $\top$   | 十        | $\top$   | 1         |          | 122      | 11                |  |  |            |                |                | $\top$              | 1             |   |
| -            | 23             | H            |          |          |          |          |              |          | $\vdash$ | $\dashv$ |          | 78                               | $\vdash$   | $\vdash$ | Ι        | П                  | _        | +        | 十        | _        |           |          | 123      | Ħ                 |  |  |            |                |                |                     | T             |   |
| $\vdash$     | 24             |              |          |          | -        | -        |              |          |          | ┨.       | <b></b>  | 74                               | -  | 1        |          | П                  | _        | $\dashv$ | 1        | _        |           |          | 124      | Ħ                 | T  |  |            |                |                | T                   | T             |   |
| <b></b>      | 25             |              |          |          |          |          |              |          |          | $\dashv$ |          | 7\$                              |  | _        |          |                    |          |          | 寸        |          | 7         |          | 125      | 1                 |  |  |            |                | Ī              |                     | $\neg$        | Т |
|              | 26             |              |          |          |          |          |              |          | $\Box$   | $\neg$   |          | 76                               |  |          |          |                    |          |          |          |          | 1         |          | 126      | N                 |  |  |            |                |                |                     | $\Box$        |   |
|              | 27             | <del> </del> |          |          |          |          |              | -        |          | $\dashv$ |          | 7                                |  |          |          | $\vdash$           |          | $\dashv$ |          |          | 1         |          | 127      | 1                 |  |  |            |                |                |                     |               |   |
|              | 28             | _            | -        |          |          |          |              |          |          | $\neg$   |          | 78                               |  |          |          |                    |          |          |          |          | 7         |          | 128      |                   |  |  |            |                |                |                     |               |   |
|              | 29             |              | $\vdash$ | _        |          |          |              |          |          | $\neg$   |          | 79                               |  |          |          |                    |          |          |          |          |           |          | 129      |                   |  |  |            |                |                | $\Box$              | $\Box$        |   |
|              | 30             |              |          |          |          |          |              |          |          |          |          | 80                               |  |          |          |                    | T        | _        |          |          |           |          | 130      |                   |  |  |            |                |                |                     |               |   |
|              | 31             |              |          |          | _        | П        |              |          |          |          |          | 8                                |  |          |          |                    |          | $\neg$   |          |          |           |          | 131      |                   |  |  |            |                |                |                     |               |   |
|              | 32             | Г            |          |          | _        |          | -            |          |          |          |          | 82                               |  |          |          |                    |          |          |          |          |           |          | 132      |                   |  |  |            |                |                |                     |               |   |
|              | 33             | Г            |          |          |          |          |              |          |          |          |          | 88                               |  |          |          |                    |          |          |          |          |           |          | 133      |                   |  |  |            |                |                |                     | ightharpoonup | _ |
|              | 34             |              | Г        |          |          |          |              |          |          |          |          | 8#                               |  |          |          |                    |          |          |          |          |           |          | 134      |                   |  |  |            | Ш              |                |                     | $\dashv$      |   |
|              | 35             | Г            |          |          |          |          |              |          |          |          |          | 85                               |  |          |          |                    |          |          | $\Box$   |          |           |          | 135      |                   | L  |  | L          | Ш              |                | _                   | $\dashv$      | _ |
|              | 35<br>36<br>37 |              |          |          |          |          |              |          |          |          |          | 85<br>86<br>87<br>88<br>89<br>90 |  |          |          |                    |          |          | $\Box$   |          | ╝         |          | 136      |                   | _  | <u>L</u>                               |            | Ш              |                |                     |               | _ |
|              | 37             |              | Γ        |          |          |          |              |          |          |          |          | 87                               |  | L        |          |                    |          | $\Box$   |          |          |           |          | 137      | <u> </u>          | $oxed{oxed}$                                     | _                                      |            |                |                | $\perp$             | $\dashv$      |   |
|              | 38<br>39       |              |          |          |          |          |              |          |          |          |          | 88                               |  |          |          |                    |          | [        |          | _[       | $\bot$    |          | 138      |                   |  |  | <u> </u>   | Ш              |                |                     | _             |   |
|              | 39             | L            |          |          |          |          |              |          |          |          |          | 89                               |  |          |          | $oxed{oxed}$       |          | $\perp$  | [        |          | _         |          | 139      |                   | $\perp$  | 1_                                     | <u> </u>   |                | _              | ,_                  |               | _ |
|              | 4þ             |              |          |          |          |          |              |          |          |          |          | 90                               | $\Box$   |          |          | $oxedsymbol{oxed}$ |          | _[       | [        |          | _         | ļ        | 140      |                   | 1_   | 1                                      | L.         |                |                | $\sqcup$            | 4             |   |
|              | 4              |              |          |          | Ľ        |          |              |          |          |          |          | 91                               |  |          | $\Box$   |                    |          |          | [        |          | _         |          | 141      | _                 | 1_   |  | L_         |                |                |                     |               | _ |
|              | 42             |              |          |          |          |          |              |          |          |          |          | 91<br>92<br>98                   |  |          | <u></u>  | $oxedsymbol{oxed}$ | Ш        | _        |          | $\perp$  | _         |          | 142      | 4_                | 4  | 1                                      | <u> </u>   |                |                | $\vdash \downarrow$ | _             |   |
|              | 48<br>44       |              |          |          |          |          |              |          |          |          |          | 98                               |  | L        | _        |                    |          | _        | _        | $\perp$  |           | <u> </u> | 143      |                   | 1  | 1_                                     | <u> </u>   | $\sqcup$       |                | $\dashv$            | _             |   |
|              | 44             |              | L        |          |          |          |              |          |          |          |          | 94                               |  |          |          |                    |          |          |          |          | _         | L_       | 144      | ١                 | <u> </u>   | <u> </u>                               | <u> </u>   | Ш              |                | Щ                   | $\dashv$      | _ |
|              | 45             |              |          |          |          | 匚        | L            |          |          |          |          | 95<br>96                         | $oldsymbol{ol}}}}}}}}}}}}}}}}}}$ | L        | _        |                    |          | _        |          | _        |           |          | 145      | 1_                | 4_   | 1                                      | ļ          | Ш              |                | $\vdash$            | $\dashv$      |   |
|              | 45<br>46<br>47 |              |          |          |          |          | L            |          | Ш        | _]       |          | 96                               | L  |          | _        |                    |          |          |          |          | _         |          | 146      | 4                 | $\perp$  | 1_                                     | <u> </u>   |                |                | Ш                   | $\dashv$      |   |
|              | 47             |              |          |          |          |          |              |          |          |          |          | 97                               | <u> </u>   |          | _        |                    |          | _        | $\perp$  | $\perp$  |           |          | 147      | $\perp$           | 1  | ــــــــــــــــــــــــــــــــــــــ | $\vdash$   | $\square$      | _              | Щ                   | $\dashv$      | _ |
|              | 48             |              |          |          |          |          |              | Ĺ        | $\Box$   |          |          | 98<br>99                         | Ц.   |          |          | <u>L</u>           | Ш        |          |          | $\perp$  | _         |          | 148      | 4                 | 1-   | -                                      | L_         | Ш              |                | $\dashv$            | $\dashv$      | _ |
|              | 49             |              |          |          |          |          |              |          |          | $\Box$   |          | 99                               | V  |          | <u></u>  | <u> </u>           | Ш        |          |          | _        | _         | <u> </u> | 149      |                   | 1  | -                                      | L          | Ш              | _              | $\vdash$            |               |   |
|              | 50             | L            |          | L        |          |          |              |          |          |          |          | 100                              | V  | <u></u>  | 1_       |                    |          |          | $\perp$  |          |           | L        | 150      | 1_                | <u>L</u>   |  | <u>L</u> . | Ш              |                |                     | $\perp$       |   |